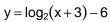
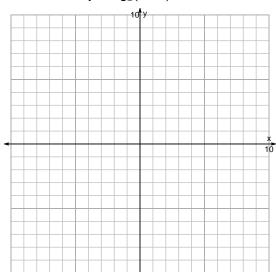
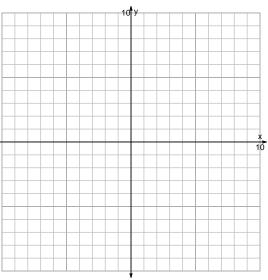
s18quiz: EXP LOG (QUIZ v220)

1. Graph  $y = \log_2(x+3) - 6$  and  $y = 2^{x-3} + 5$  on the grids below. Also, draw any asymptotes with dotted lines.





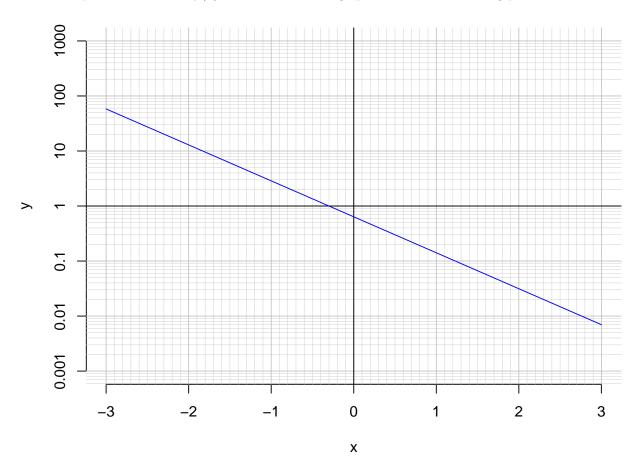
$$y = 2^{x-3} + 5$$



2. Write (but do not evaluate) the solution to the equation below by writing a logarithmic expression.

$$29 = \left(\frac{7}{4}\right) \cdot 10^{-5t/3}$$

3. An exponential function  $f(x) = 0.637 \cdot e^{-1.5x}$  is graphed below on a semi-log plot.



a. Using the plot above, evaluate f(0.5).

- b. Express  $f^{-1}(x)$ , the inverse of f.
- c. Using the plot above, evaluate  $f^{-1}(0.02)$ .